

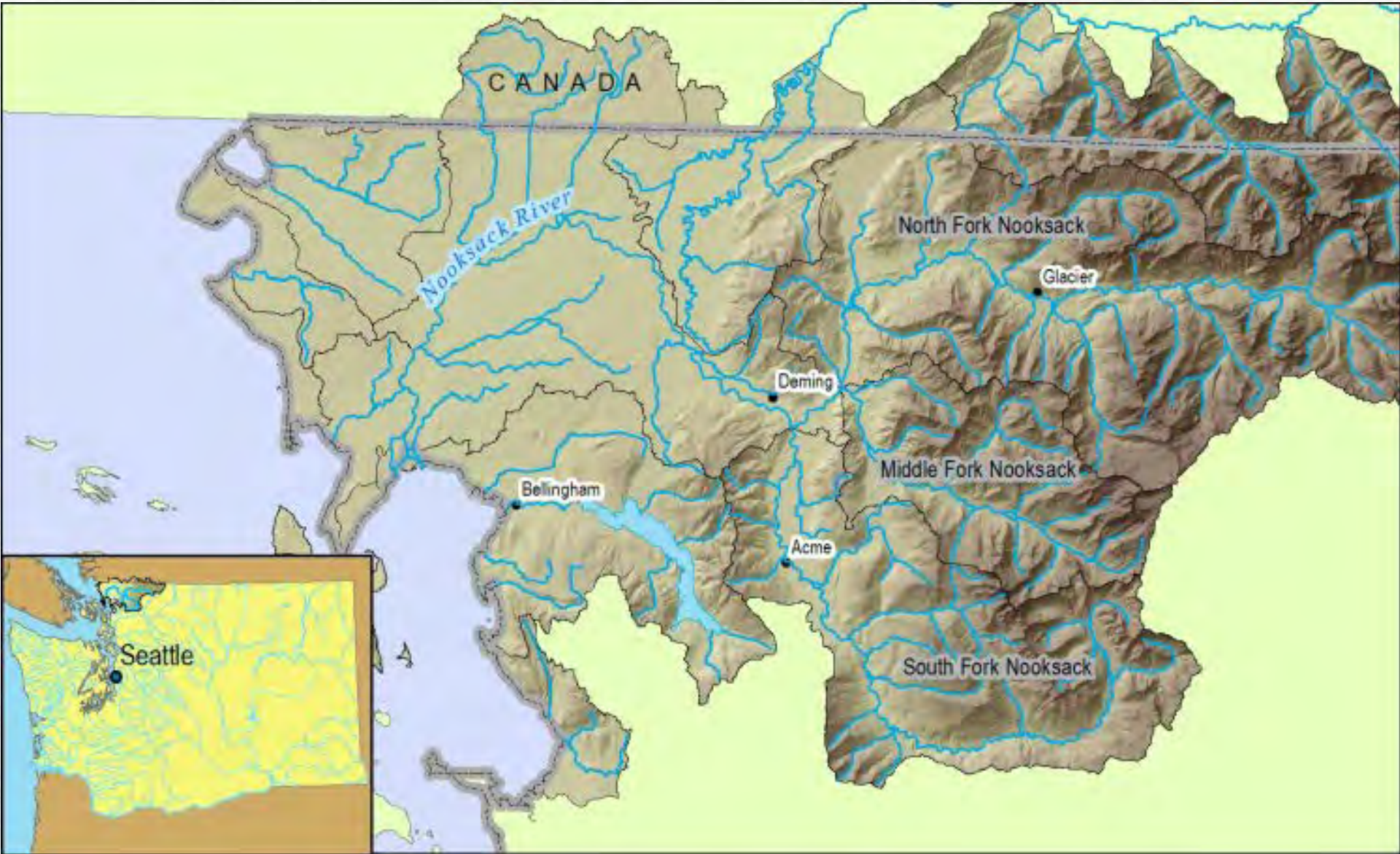
US EPA ARCHIVE DOCUMENT

Geology of the SF Nooksack

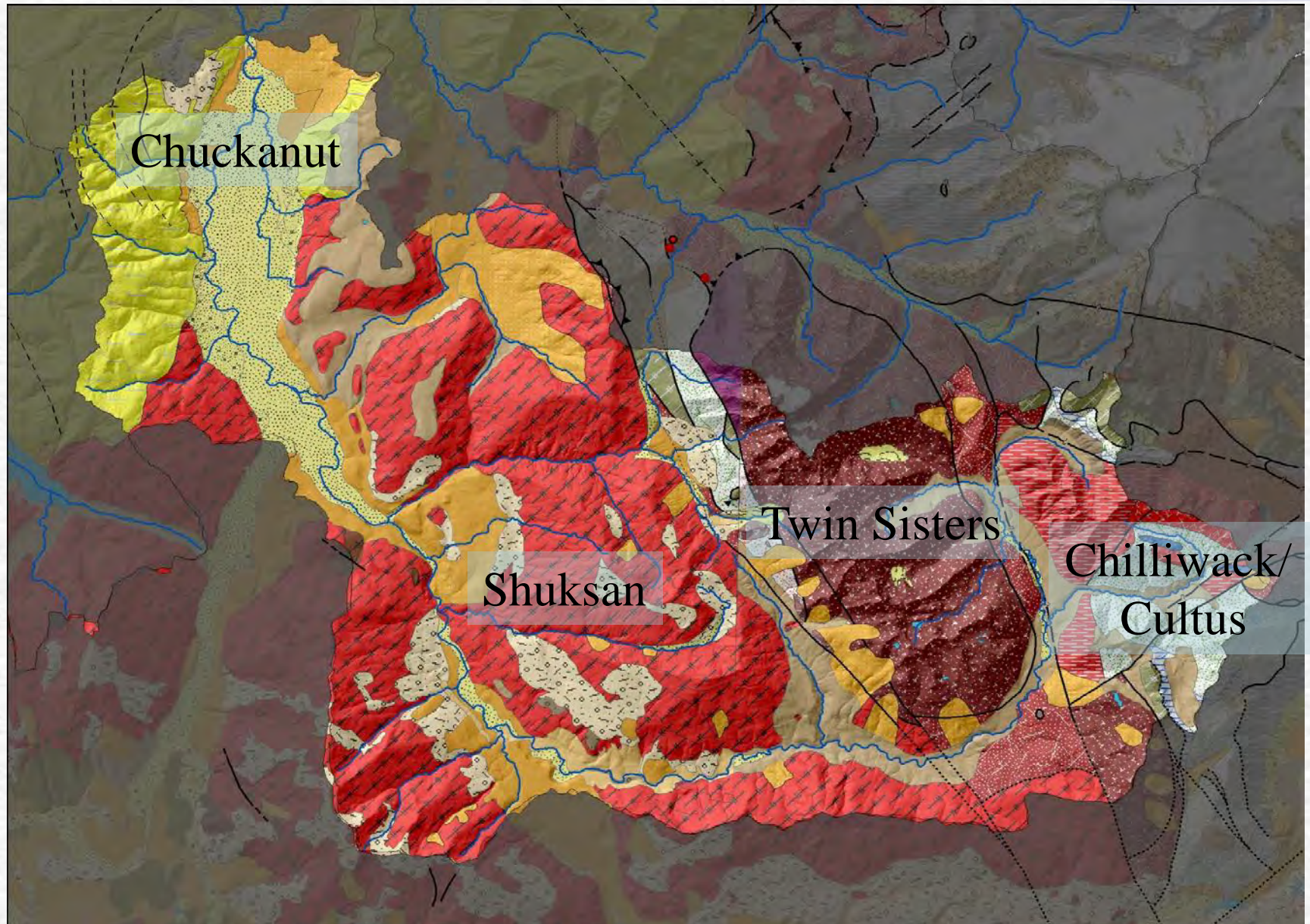
Michael Maudlin
Nooksack Natural Resources

John Thompson
Whatcom County Public Works

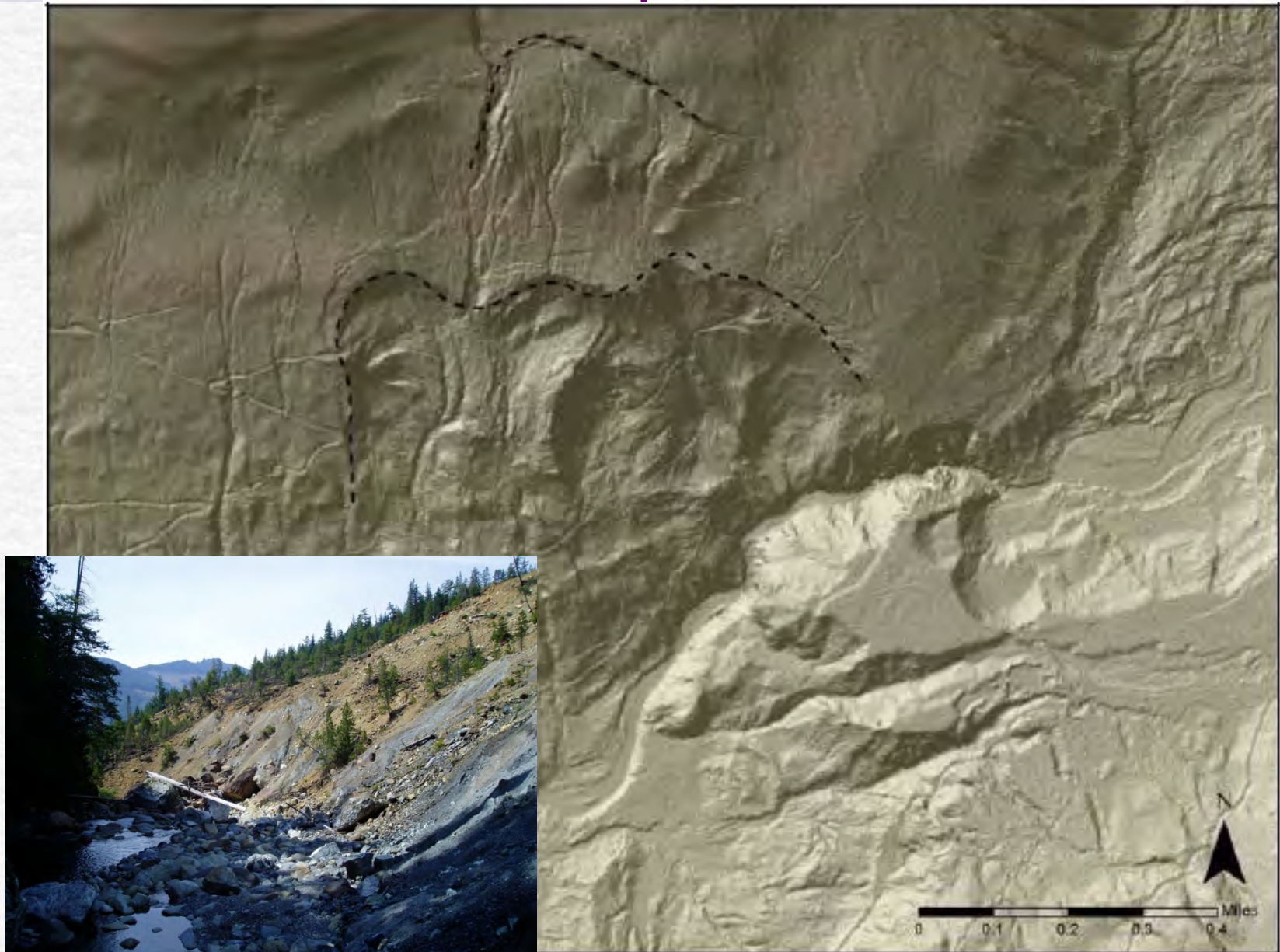
SF Nooksack Watershed



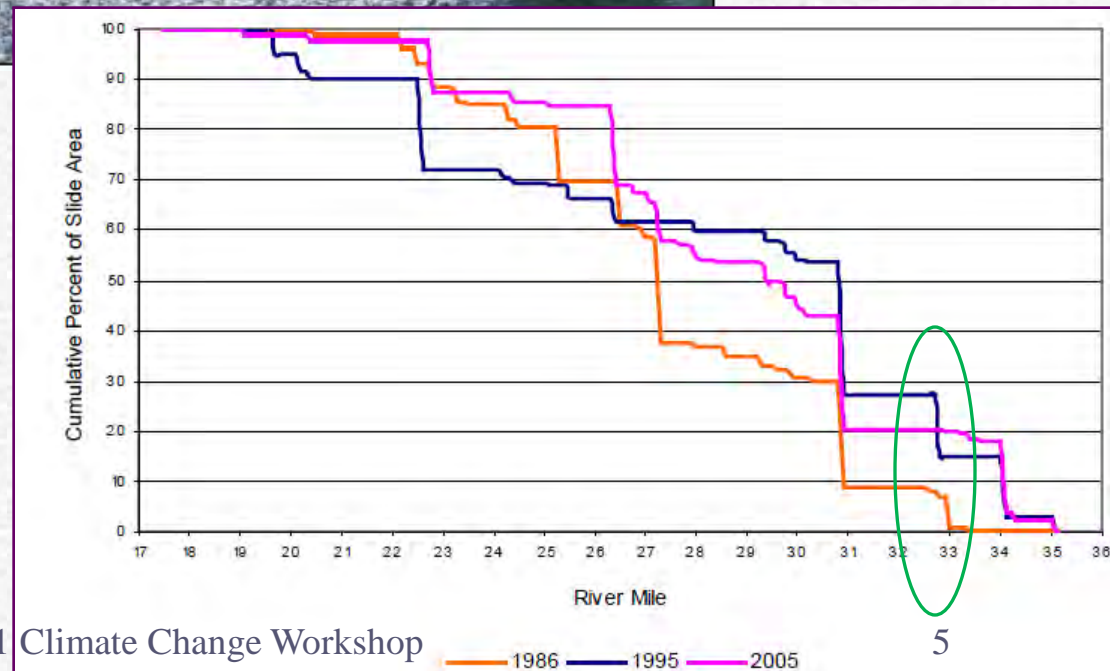
Surficial Geology



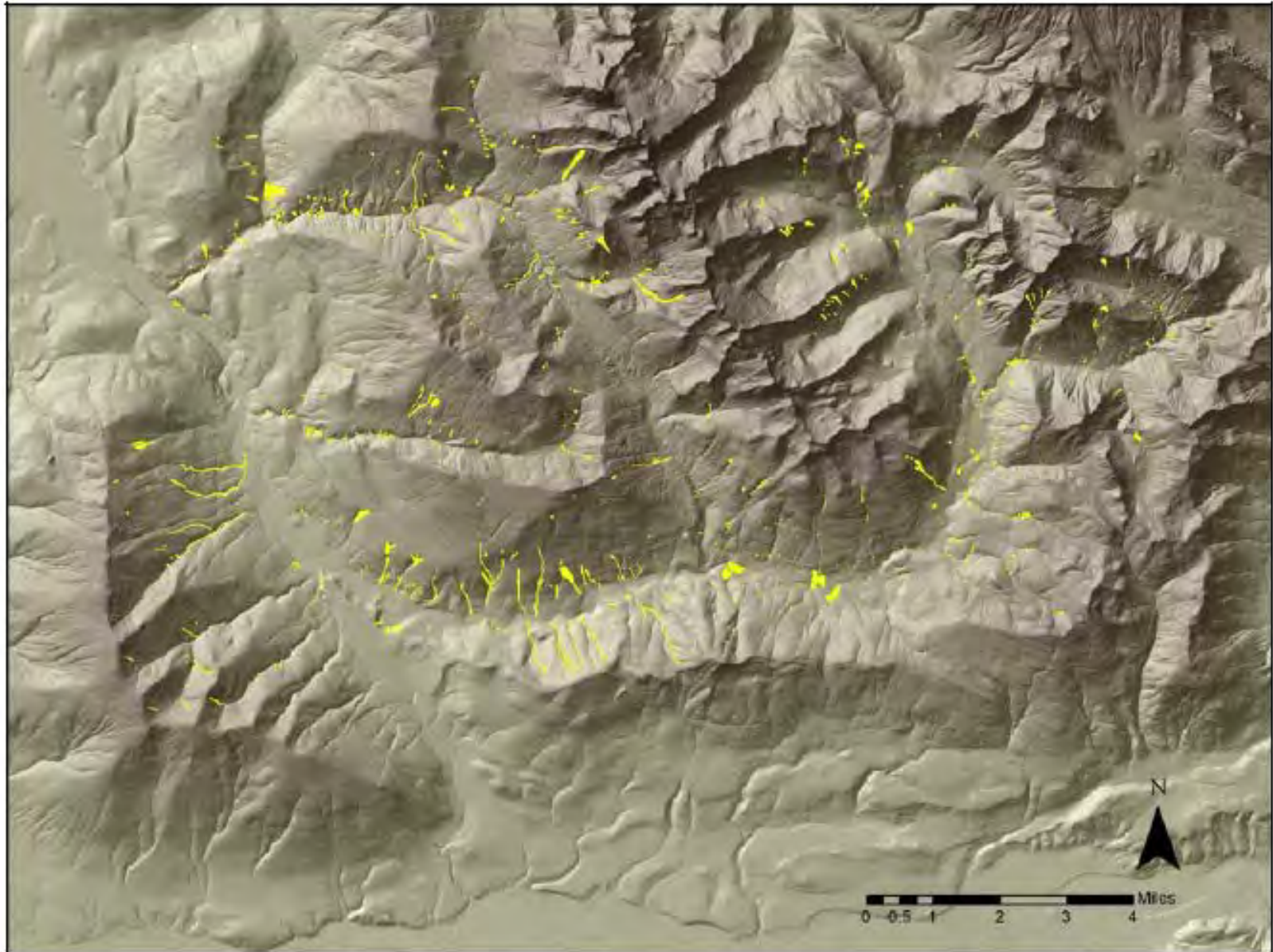
SF Nooksack Deep-seated Landslides



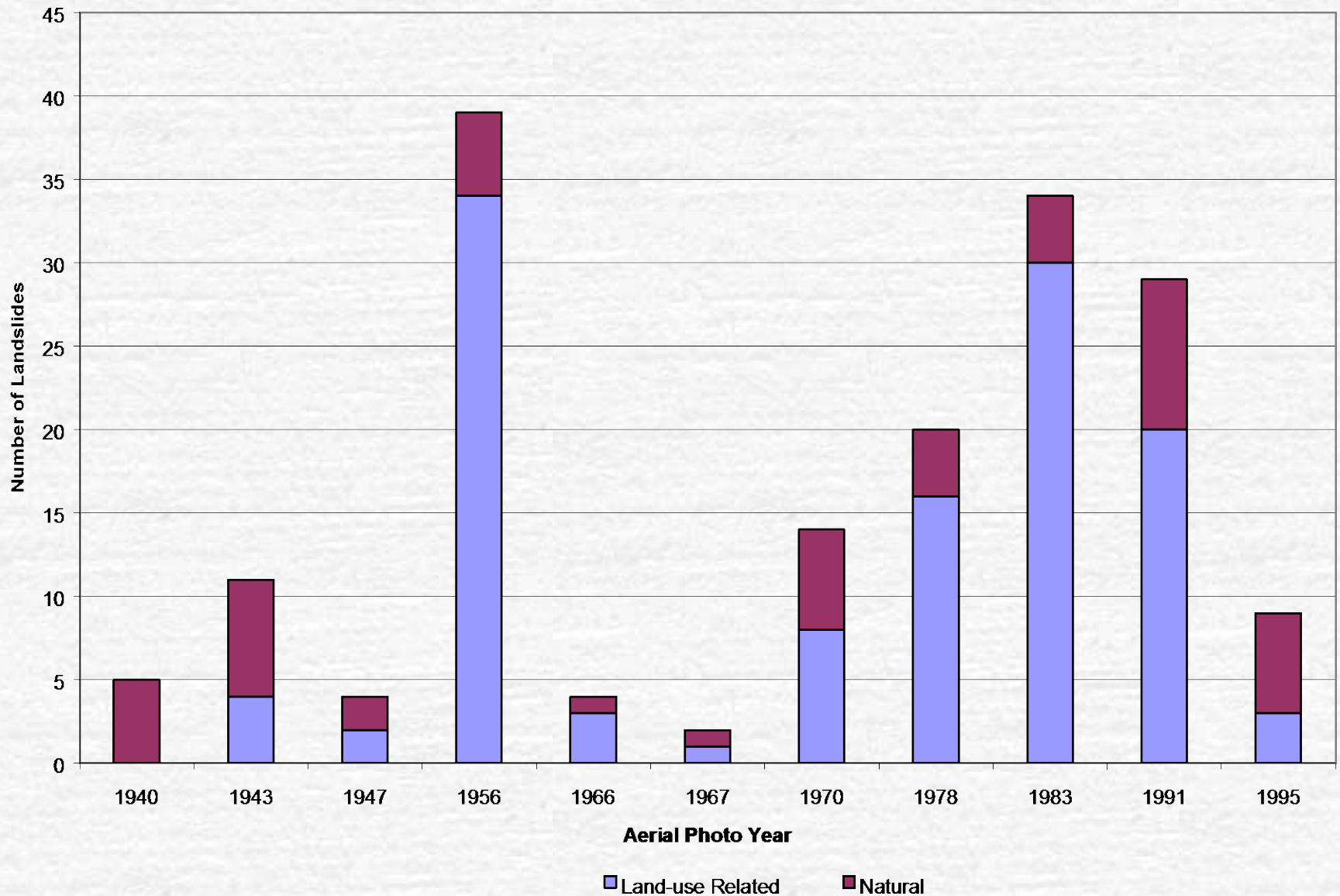
SF Nooksack Stream-adjacent Landslides



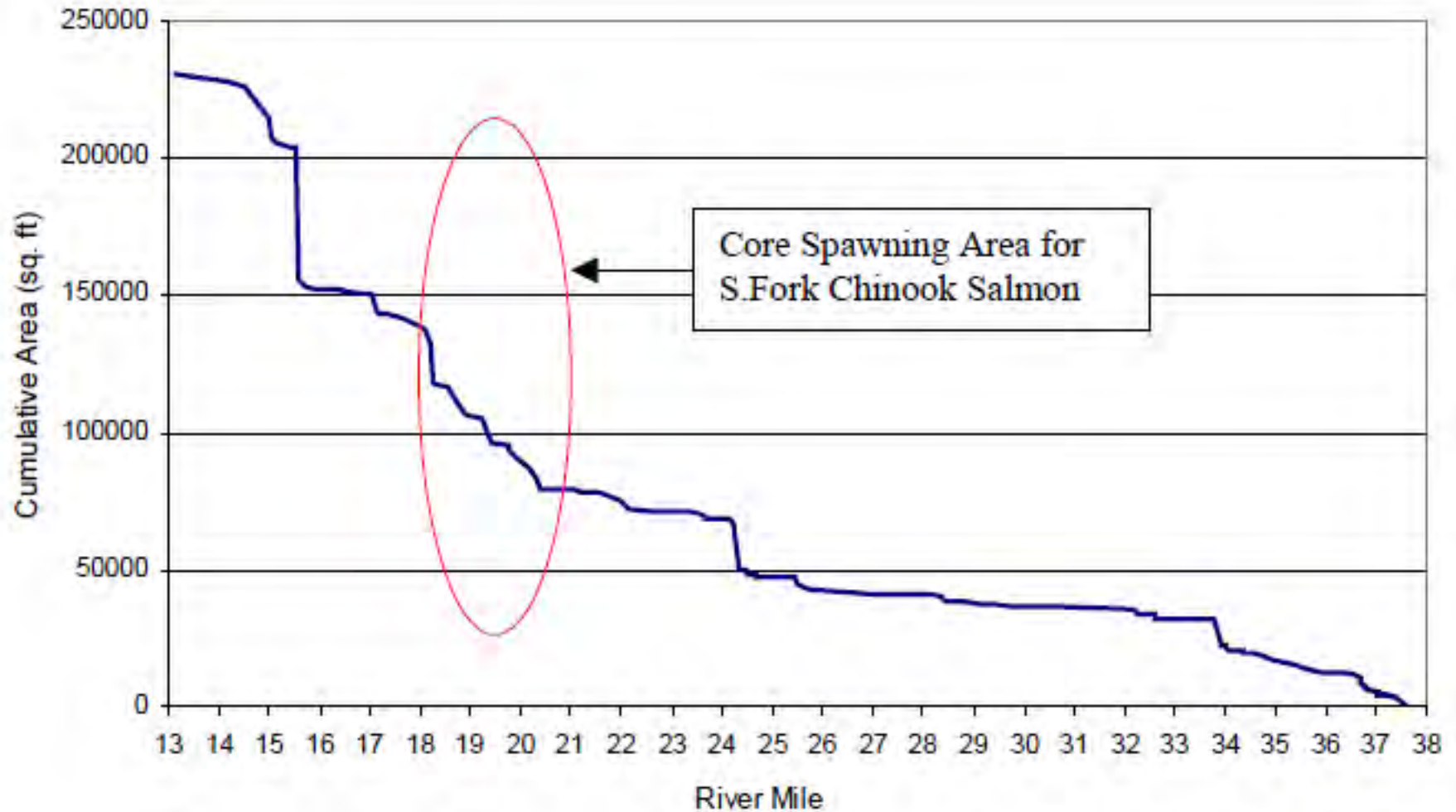
SF Nooksack Shallow-Rapid Landslides



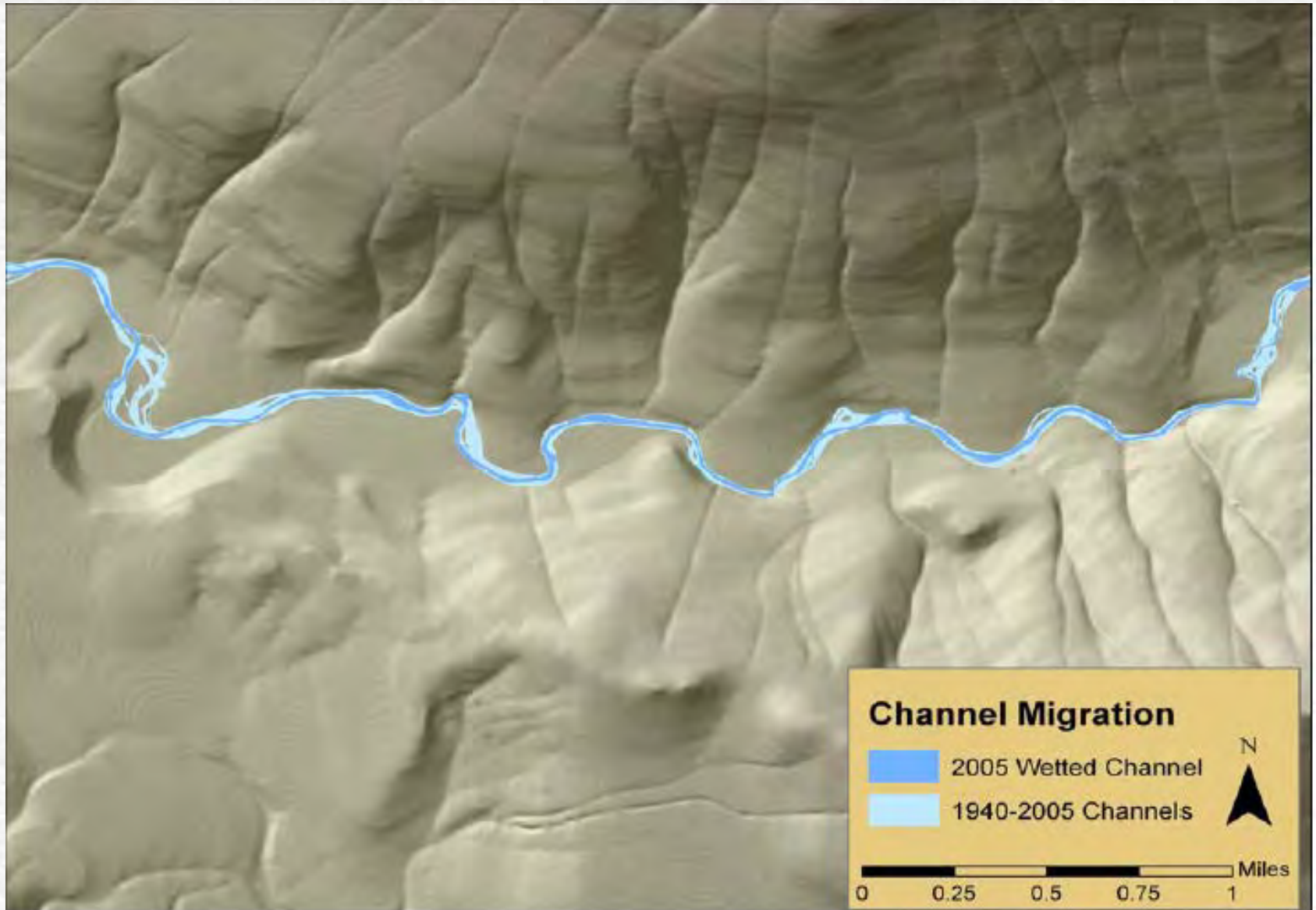
SF Nooksack Shallow-Rapid Landslides



Upper SF Nooksack Gravel Distribution



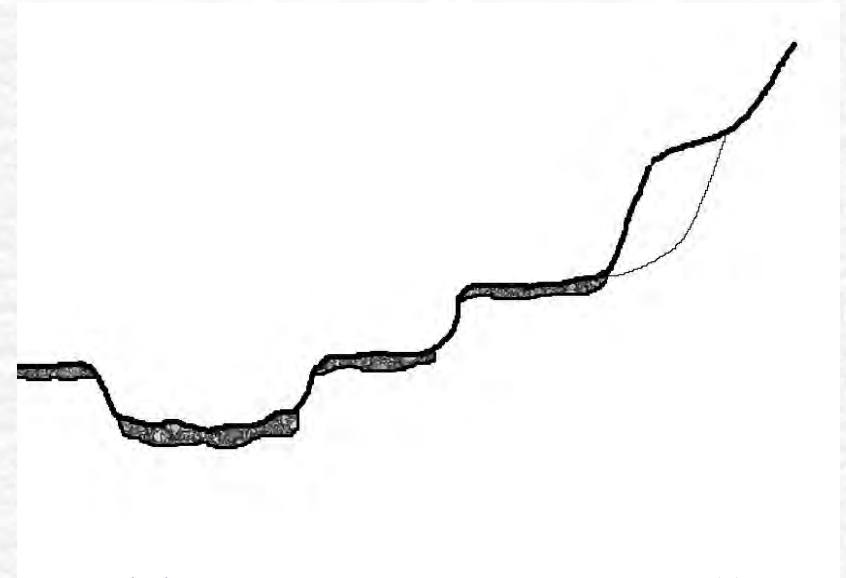
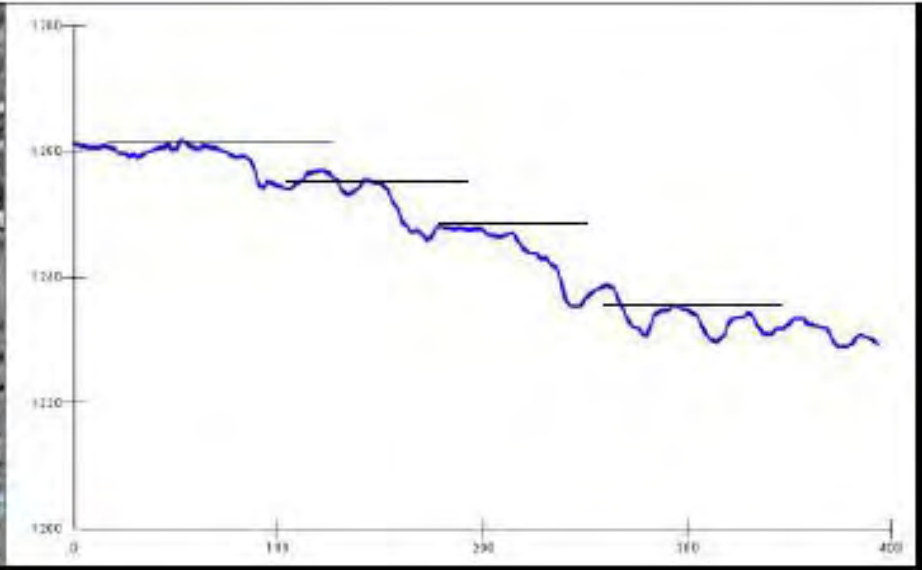
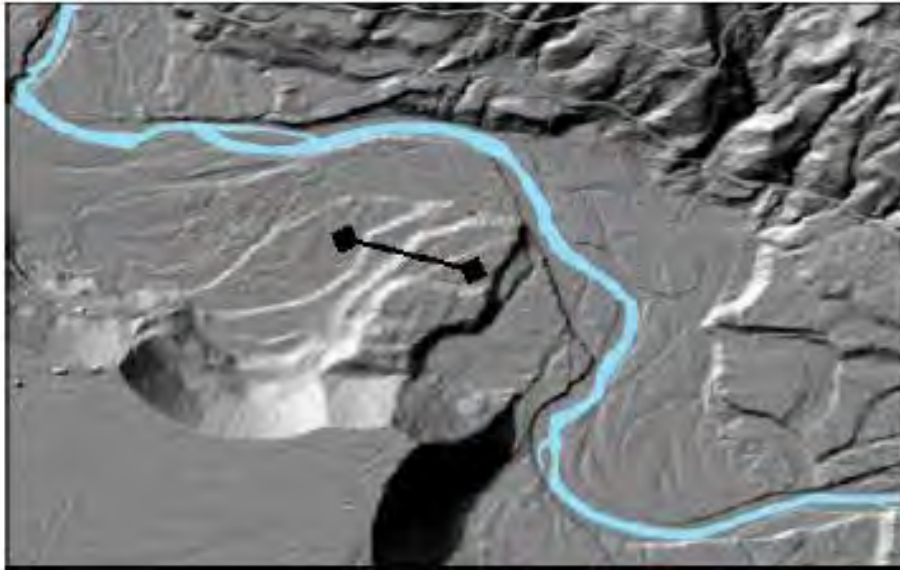
Upper SF Nooksack Channel Migration



Upper SF Nooksack Channel Migration



Upper SF Nooksack Degradation



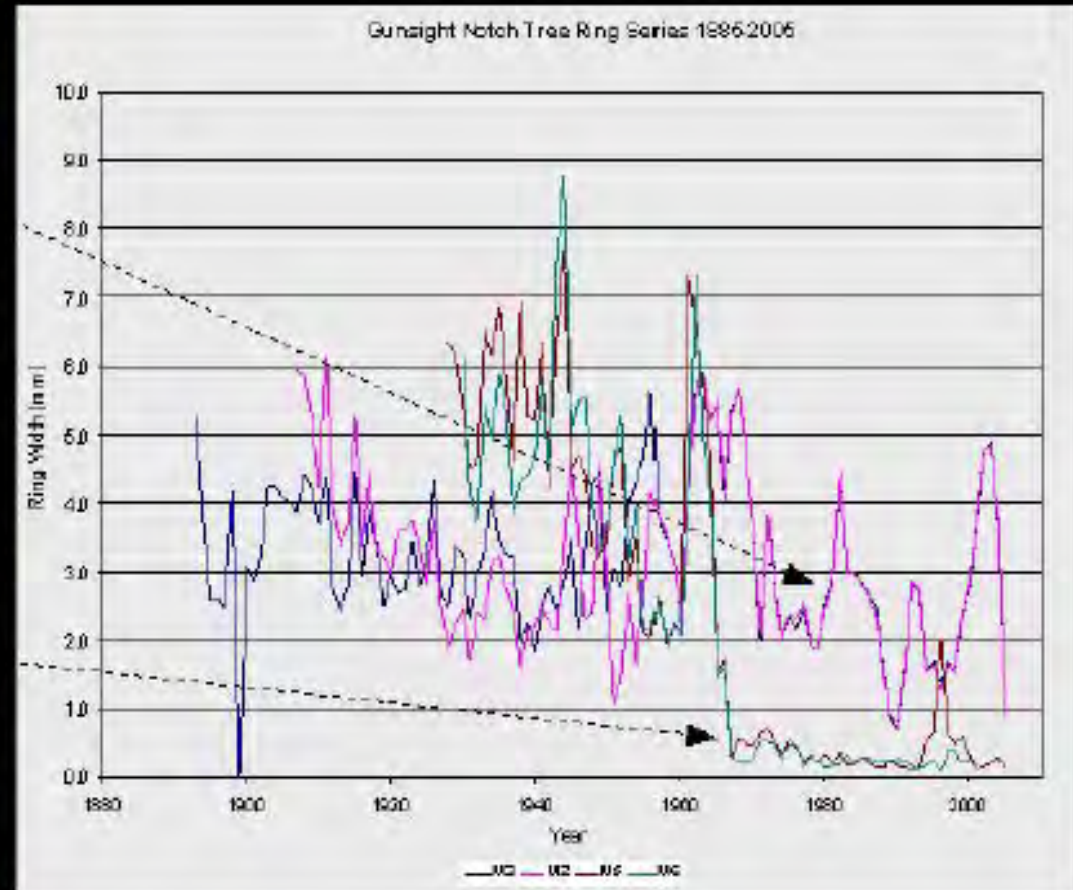
Upper SF Nooksack Channel Bed RM 25



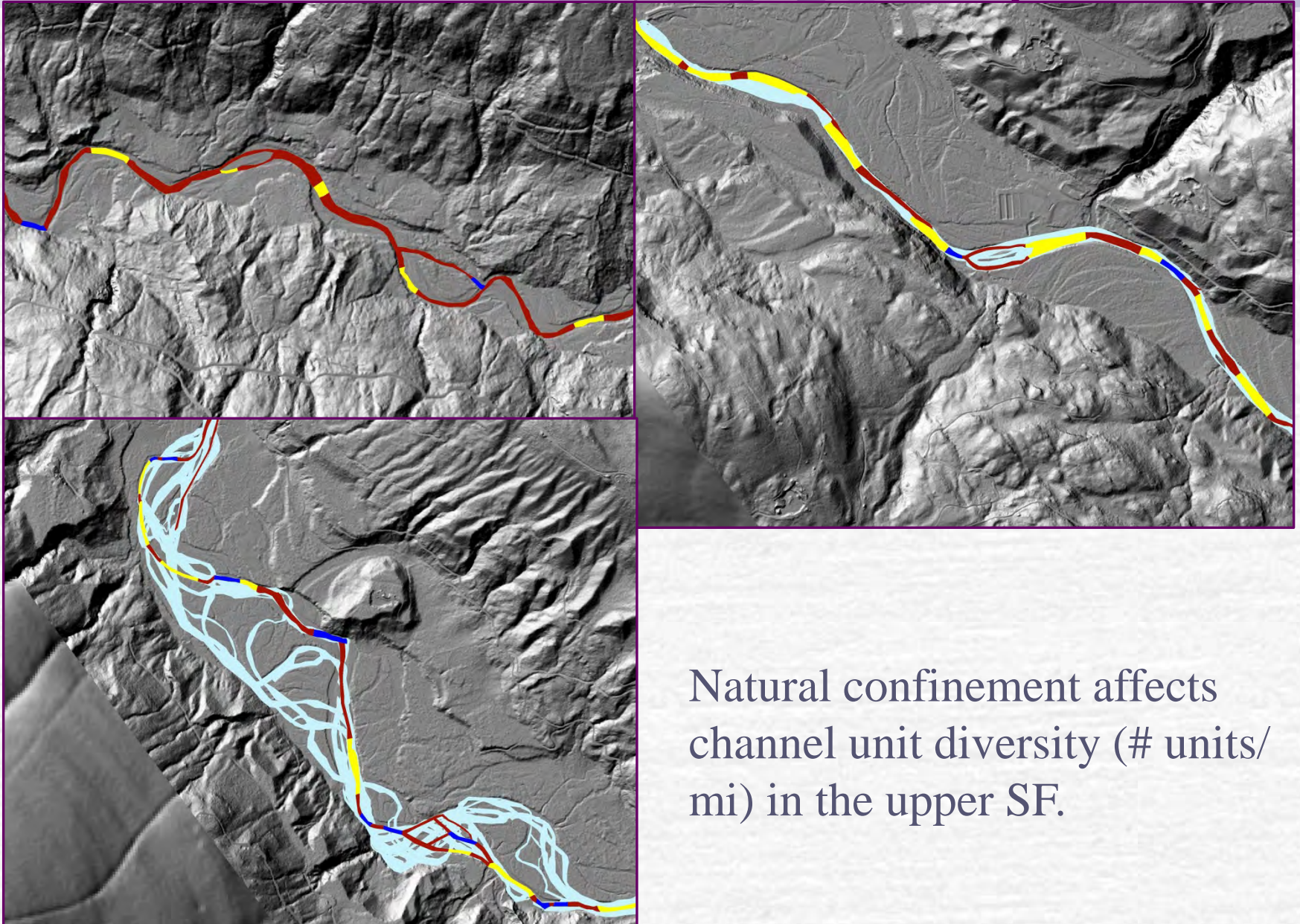
Upper SF Nooksack Channel Bed RM 30



Upper SF Nooksack Aggradation Reach

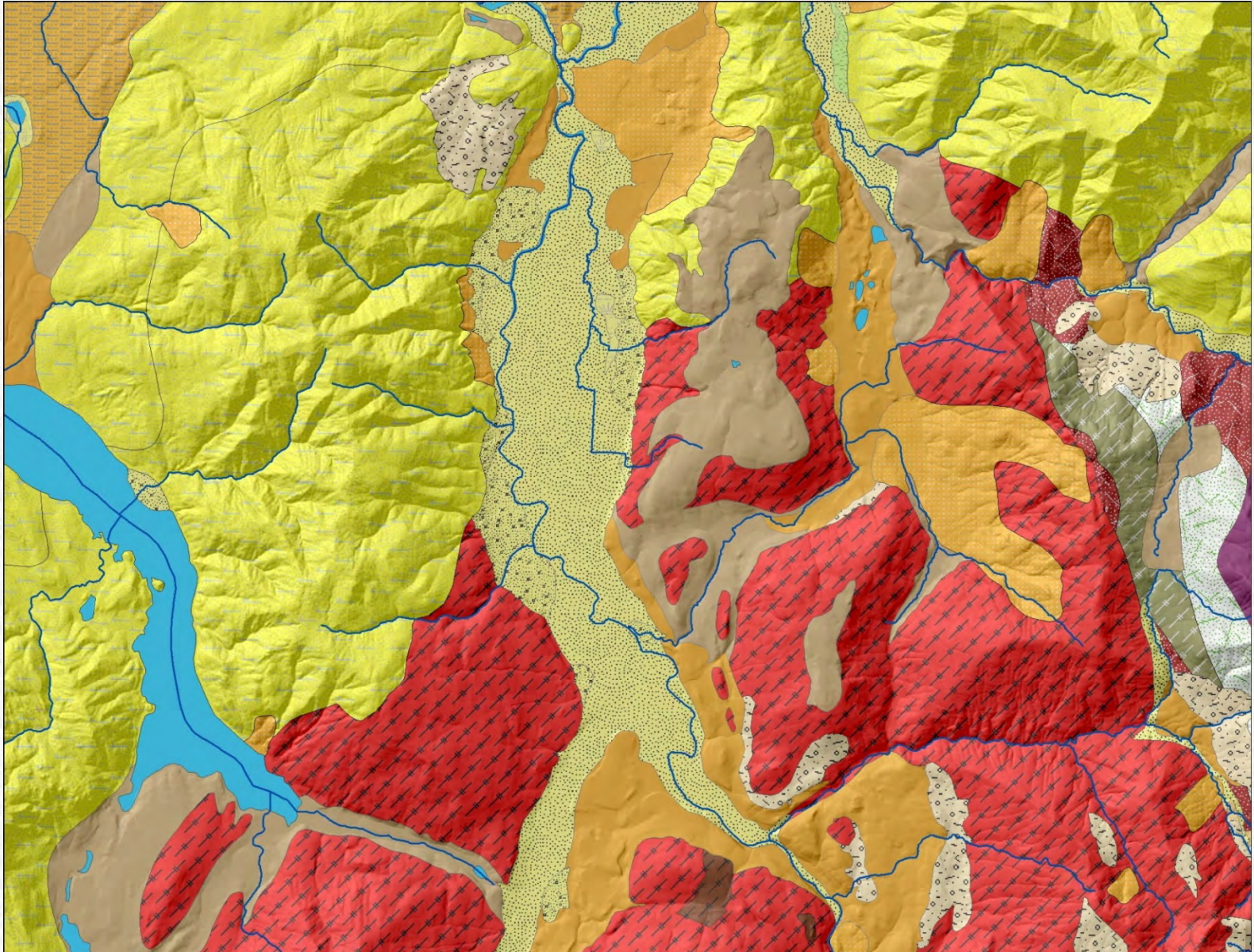


Channel Unit Diversity

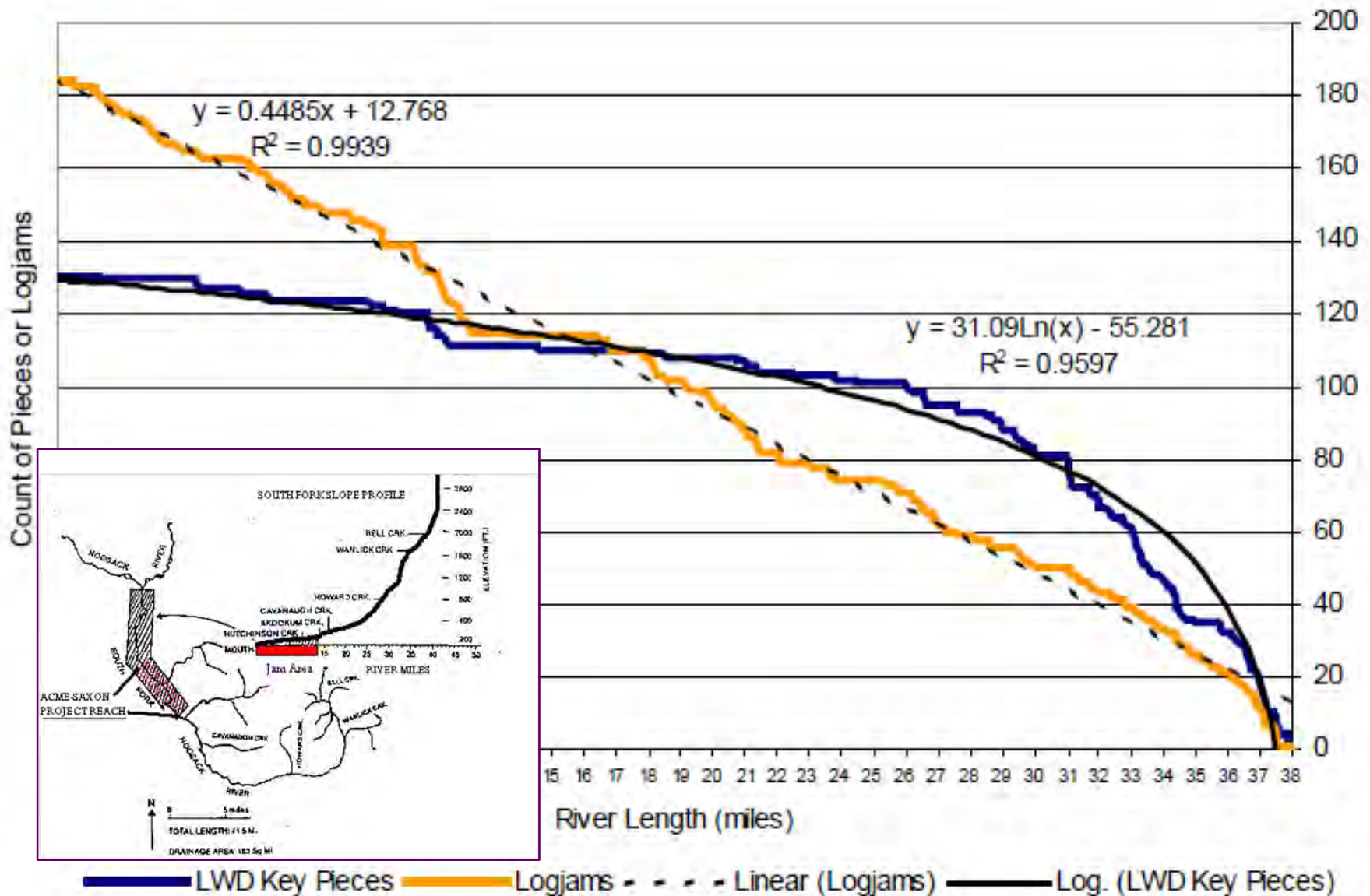


Natural confinement affects channel unit diversity (# units/mi) in the upper SF.

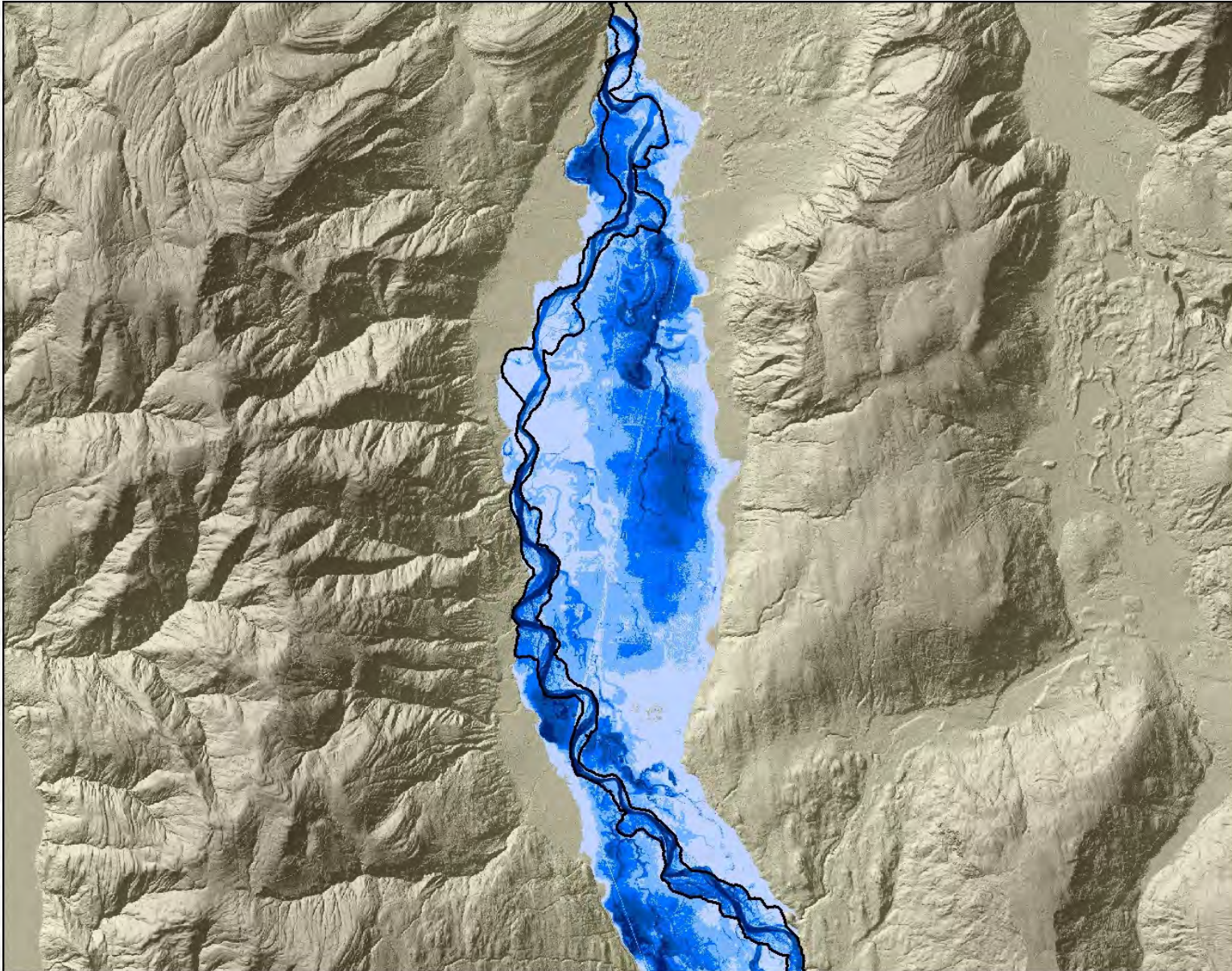
Acme Valley



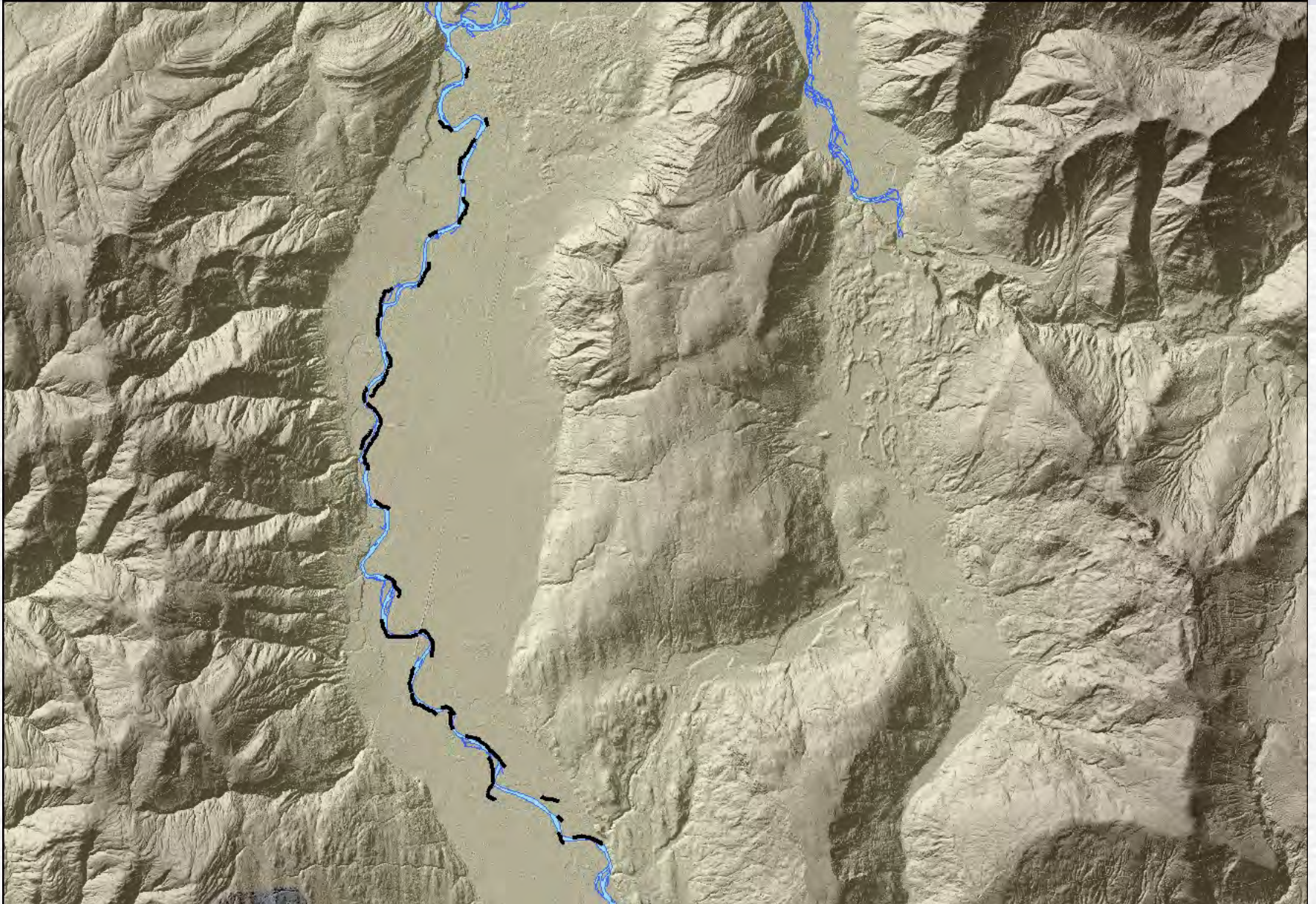
SF Nooksack LWD Distribution



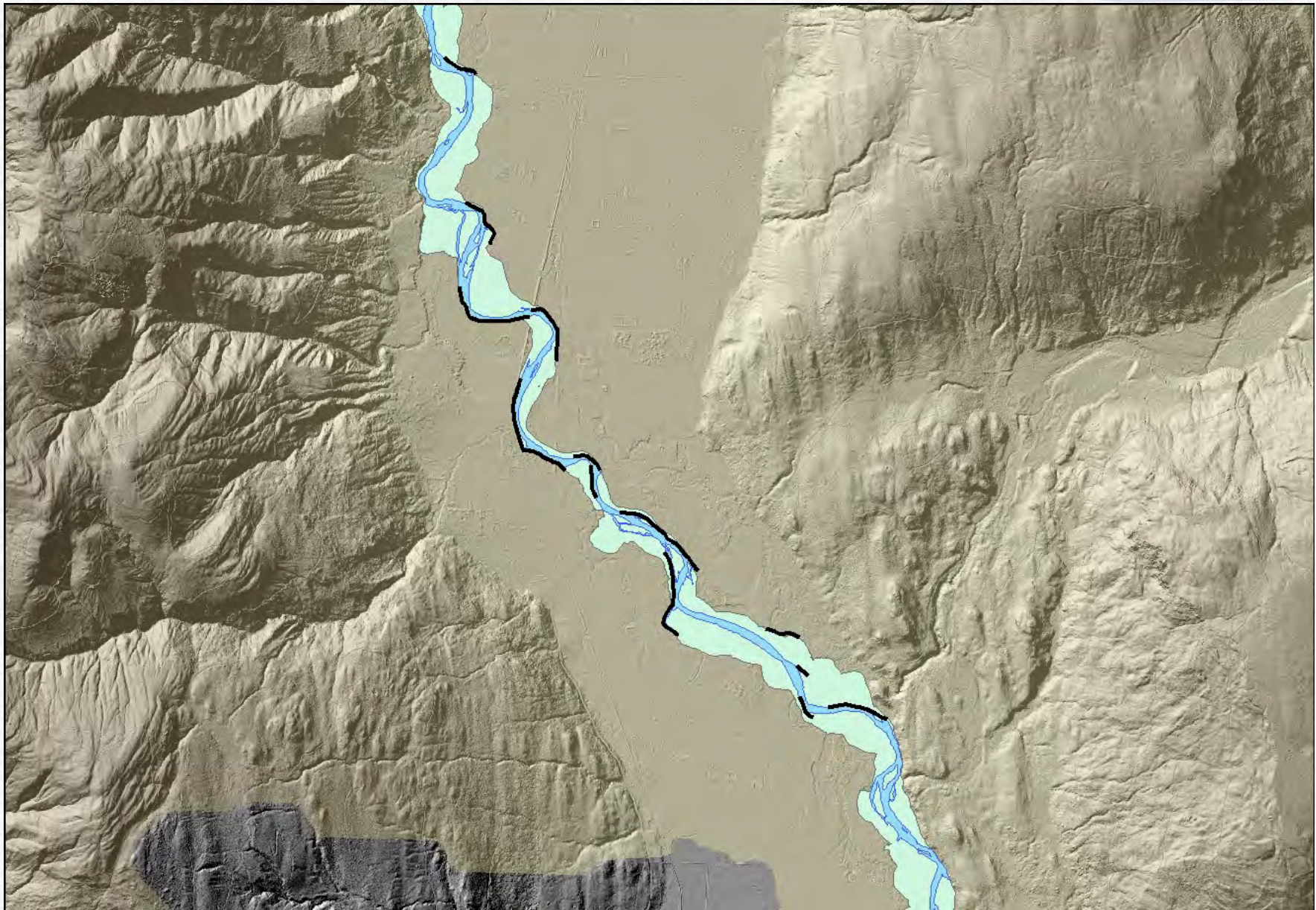
Acme Valley Floodplain Topography



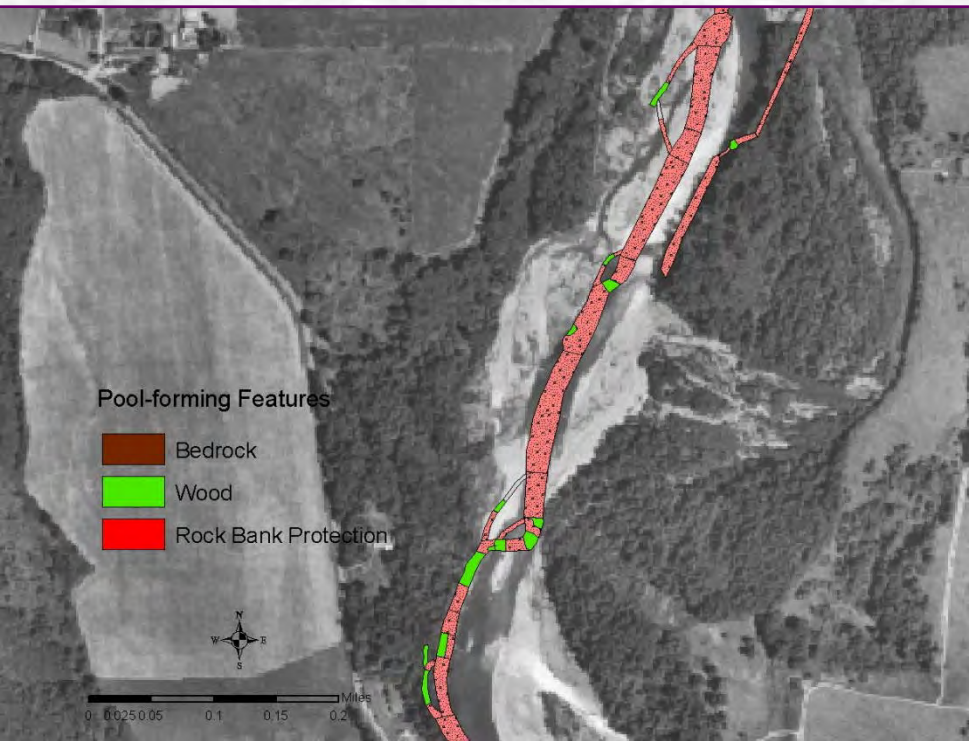
Acme Valley Bank Armor



Acme Valley Bank Armor with HMZ

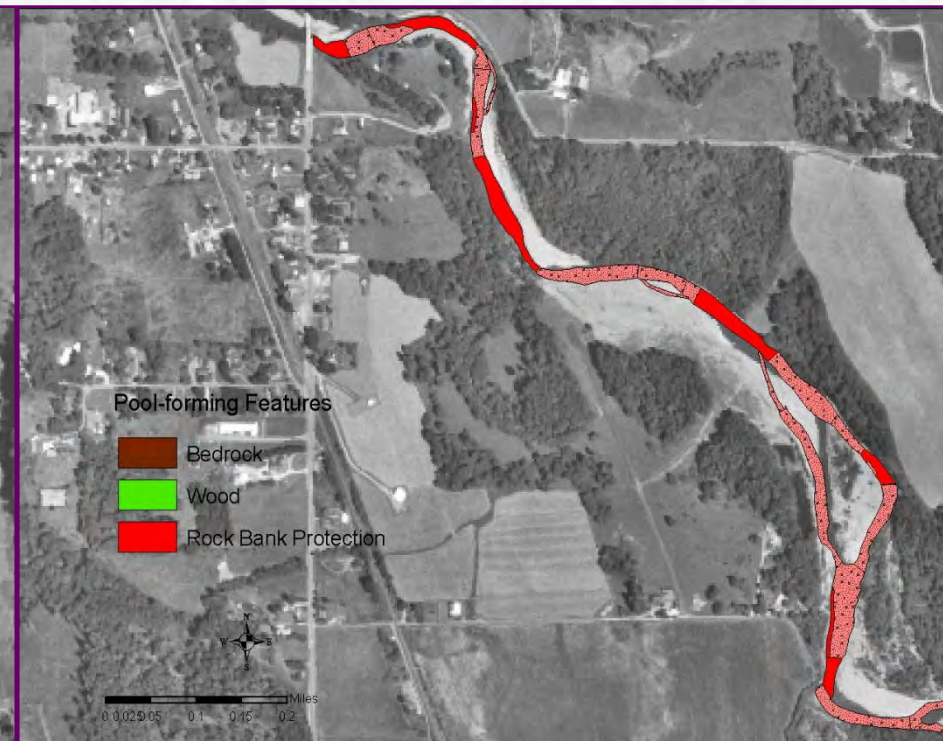


Channel Unit Diversity



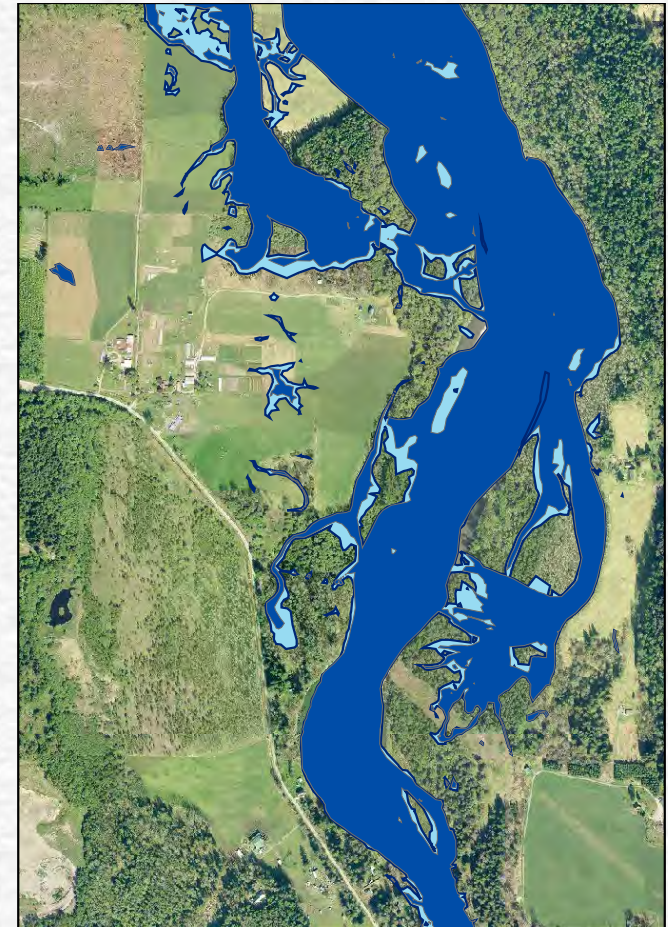
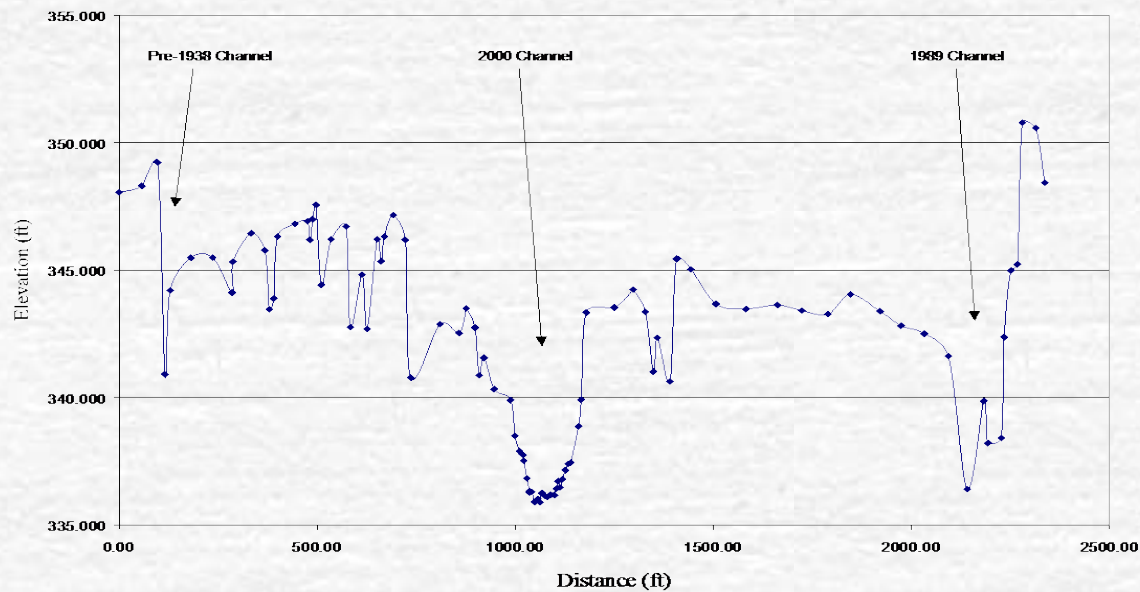
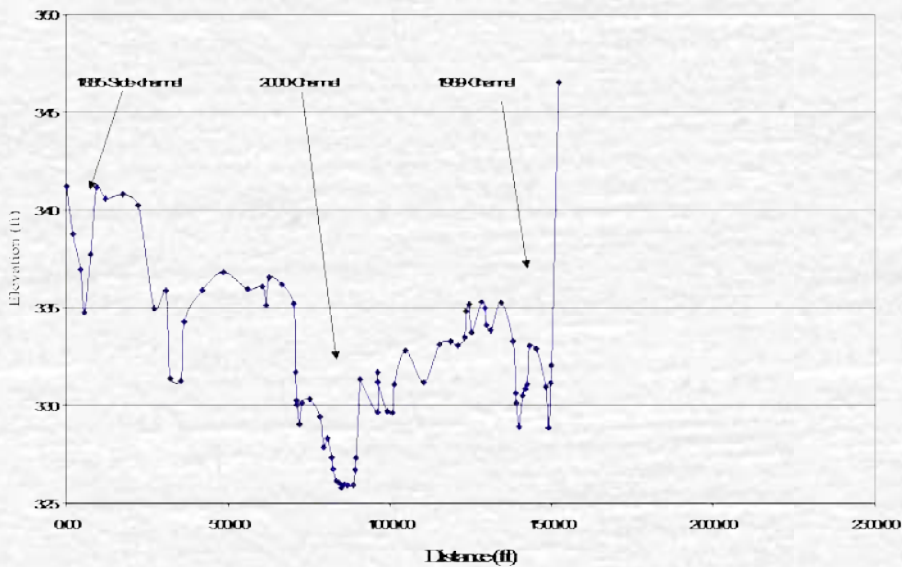
Unconfined

- More frequent pools
- LWD-formed
- Deeper, relative to area



Confined

Acme Valley Channel Degradation



10-year and 100-year
Floodplains

Van Zandt Landslide and Channel

